

Amendments to the Claims

A complete listing of the claims follows. Please amend claims 1, 2, 4-5, 8, 11-17, 19-24, 27, 30-35 and 37, and add claims 38-55 as indicated below. Please cancel claims 6, 7, 9, 10, 18, 25, 26, 28, 29, and 36.

Listing of Claims

1. (Currently Amended) A method of ~~indexing~~ generating a data string representing the contents of a media element, the method comprising:
 - ~~identifying the a media element to be indexed, the media element having a plurality of components;~~
 - determining a first component value for one or more of the plurality of the components within the media element;
 - identifying a subset of the plurality of components, each having a component value substantially similar to the first component value;
 - determining a set of relationships among the subset of the plurality of components; and
 - ~~selecting a characterization process to be applied to said media element;~~
 - ~~applying said characterization process to said media element, said characterization process to include,~~
 - generating a data string for said media element in response to the determined relationships, said data string including trait information for said media element; and
 - ~~indexing the media element using said data string.~~
2. (Currently Amended): The method of claim 1, wherein ~~said~~ the media element is one of a video clip, static photograph, JPEG image, animation, audio clip, and text.
3. (original): The method of claim 1, wherein identifying the media element comprises selecting the media element and loading the media element into a memory of a

computer system.

4. (Currently Amended): The method of claim 3, wherein loading the media element into the ~~said~~-memory comprises downloading ~~said~~ the media element over a network connection.

5. (Currently Amended): The method of claim 1, further comprising determining if the media element can be compressed and, if so, compressing ~~a data file containing said~~ the media element ~~before applying the characterization process to said media element~~.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended): The method of claim ~~7~~1, wherein ~~determining at least one common pixel value comprises determining at least one common pixel value for said media element, and wherein said the set of relationships between said first pixel and second pixel is based on a relative distances between among the subset of the plurality of componentssaid first and second pixels.~~

9. (Cancelled)

10. (Cancelled)

11. (Currently Amended): The method of claim ~~[[9]]~~38, further comprising generating a histogram band for each of the plurality of component values for the one or more components within the~~said at least one common pixel value of said media element, where said histogram bands are based on a percentage of a predetermined area of said media element that said at least common pixel value represents.~~

12. (Currently Amended): The method of claim ~~[[9]]~~40, further comprising adjusting ~~at least one of said first and second~~ the tolerance~~[[s]] to achieve a desired resultsuch that~~ the subset of the plurality of components includes a minimum number of components.

13. (Currently Amended): The method of claim 1, further comprising assigning a label to thesaid media element, ~~and accessing said media element using said label.~~

14. (Currently Amended): The method of claim 13, wherein thesaid label is used as a reference pointer to thesaid data string.

15. (Currently Amended): The method of claim ~~42~~41, wherein indexing thesaid media element comprises comparing thesaid data string for thesaid media element to the data strings associated with the reference media elements ~~an additional data string, said additional data string corresponding to an additional media element, and associating the media element with the additional media element where said data string and additional data string have a common trait.~~

16. (Currently Amended): The method of claim ~~42~~41, further comprising displaying a result of thesaid indexing to a user.

17. (Currently Amended): The method of claim 1, wherein the subset of the plurality of the components is selected from~~said characterization process is applied only to a~~ predetermined area of thesaid media element.

18. (Cancelled)

19. (Currently Amended): The method of claim 13, further comprising retrieving the said media element using the assigned label~~by reviewing a list of labels, each of said labels corresponding to a data string representing an indexed media element; and selecting said media element from said list for display.~~

20. (Currently Amended): A system for ~~indexing~~ generating a data string representing the contents of a media element, the system comprising:

a processor;
~~a display coupled to the processor;~~
a memory coupled to the processor, the memory containing instruction sequences to cause ~~said~~ the processor to:

identify the ~~a~~ media element to be indexed the media element having a plurality of components;

~~select a characterization process to be applied to said media element;~~

~~apply said characterization process to said media element, said characterization process to,~~

determine a first component value for one or more of the plurality for the components within a media element;

identify a subset of the plurality of components, each having component value substantially similar to the first component value;

determine a set of relationships among the subset of the plurality of components; and

generate a data string for said media element, in response to the determined relationships. ~~said data string including trait information for said media element; and index the media element using said data string.~~

21. (Currently Amended): The system of claim 20, wherein ~~said~~ the media element is one of a video clip, static photograph, JPEG image, animation, audio clip, and text.

22. (Currently Amended): The system of claim 20, wherein ~~said~~ the instruction sequences further comprise instructions to cause ~~said~~ the processor to ~~identify the media element include instruction sequences to select the media element and to load the media element into the memory.~~

23. (Currently Amended): The system of claim 22, wherein ~~said~~ the media element is loaded into the memory by downloading ~~said~~ the media element over a network connection.

24. (Currently Amended): The system of claim 20, wherein ~~said~~ the memory further includes instruction sequences to cause ~~said~~ the processor to determine if the media element can be compressed and, if so, to compress ~~a data file containing~~ said the media element before applying the characterization process to said media element.

25. (Cancelled)

26. (Cancelled)

27. (Currently Amended): The system of claim ~~26~~ 20, wherein ~~said at least one common pixel value is at least one common pixel color for said media element, and said the set of relationships between said first pixel and second pixel is based on a relative distances between said first and second pixels among the subset of the plurality of components~~.

28. (Cancelled)

29. (Cancelled)

30. (Currently Amended): The system of claim ~~28~~ 47, ~~where said characterization process is further to,~~ wherein the instruction sequences further cause the processor to:

generate a histogram band for each of said at least one common pixel value of said media element, where said histogram bands are based on a percentage of a predetermined area of said media element that said at least common pixel value represents the plurality of component values for the one or more components of the media element.

31. (Currently Amended): The system of claim ~~28~~48, where ~~said characterization process~~the instruction sequences is further to,

adjust ~~at least one of said first and second~~ the tolerance~~[[s]]~~ ~~to achieve a desired result~~ such that the subset of the plurality of components includes a minimum number of components.

32. (Currently Amended): The system of claim 20, where ~~said~~ the memory further includes instructions sequences to cause ~~said~~ the processor to assign a label to ~~said~~ the media element, ~~and to access said media element using said label.~~

33. (Currently Amended): The system of claim 32, wherein ~~said~~ the label is used as a reference pointer to ~~said~~the data string.

34. (Currently Amended): The system of claim ~~20~~51, wherein ~~said~~ the instruction sequences ~~to cause said processor to index said media element~~ further include~~[[s]]~~ instructions sequences to:

compare ~~said~~ the data string for ~~said~~ the media element to ~~an additional data string, said additional data string corresponding to an additional media element, and~~
~~to associate the media element with the additional media element where said data string and additional data string have a common trait~~ the data strings associated with the reference media elements.

35. (Currently Amended): The system of claim 20, wherein ~~said characterization process is applied only to~~ the subset of the plurality of the components is selected from a predetermined area of ~~said~~ the media element.

36. (Cancelled)

37. (Currently Amended): The system of claim ~~20~~32 wherein said instruction sequences further cause ~~said~~ the processor to retrieve ~~said~~ the media element by

~~displaying a list of labels, each of said labels corresponding to a data string representing an indexed media element; and to receive user input to select said media element from said list for display using the assigned label.~~

38. (New): The method of claim 1, further comprising determining a plurality of component values for the subset of the plurality of components.

39. (New): The method of claim 1 further comprising providing a tolerance level for the first component value.

40. (New): The method of claim 39 wherein each component in the subset of the plurality of components has a component value within the tolerance level of the first component value.

41. (New): The method of claim 1 further comprising providing one or more reference media elements, each reference media element having an associated data string.

42. (New): The method of claim 41 further comprising indexing the media element in response to the generated data string and one or more of the data strings associated with the one or more reference media elements.

43. (New): The method of claim 1 wherein the components within the media element are one of pixels or shapes.

44. (New): The method of claim 43 wherein the components are pixels, and the first component value comprises a color value, a brightness value, a texture value, a fog value, or a chrominance value.

45. (New): The method of claim 43 wherein the components are shapes, and the first component value comprises coordinates representing the location of the shapes within the media element.

46. (New): The method of claim 19 further comprising displaying the retrieved media element.

47. (New): The system of claim 20 wherein the instruction sequences further cause the processor to determine a plurality of component values for the subset of the plurality of components.

48. (New): The system of claim 20 wherein the instruction sequences further cause the processor to determine a tolerance level for the first component value.

49. (New): The system of claim 48 wherein each component in the subset of the plurality of components has a component value within the tolerance level of the first component value.

50. (New): The system of claim 20 wherein the memory further comprises one or more reference media elements, each reference media element having an associated data string.

51. (New): The system of claim 50 wherein the instruction sequences further cause the processor to index the media element in response to the generated data string and one or more of the data strings associated with the reference media elements.

52. (New): The system of claim 20 wherein the components within the media element are one of pixels or shapes.

53. (New): The system of claim 52 wherein the components are pixels, and the first component value comprises a color value, a brightness value, a texture value, a fog value, or a chrominance value.

54. (New): The system of claim 52 wherein the components are shapes, and the first component value comprises coordinates representing the location of the shapes within the media element.

55. (New): The system of claim 37 wherein the instruction sequences further cause the processor to display the retrieved media element.